



## AbovEdge™ MA-5335 T1/E1 VoIP Trunking Gateway

AbovEdge™ MA-5335 is a high density VoIP gateway product that provides digital trunk interface supporting 1 T1/E1/PRI channel.

The **AbovEdge™** MA is a series of high performance standalone Voice over IP (VoIP) gateway that compatible with most phone systems. The built-in IVR function and intelligent routing capabilities makes AbovEdge™ MA series the ideal product for businesses to implement cost saving IP telephony. The AbovEdge™ MA series supporting standard VoIP protocol can be easily merged into an existing VoIP domain as an origination and/or termination node(s).

### FEATURES

- ▶ Conforms to IETF latest SIP protocol RFC-3261
- ▶ Peer-to-peer or routing through a proxy server
- ▶ DTMF dialing, Support Out-Band DTMF delivery
- ▶ Jitter buffer to improve voice quality
- ▶ Maximum length of extension line connect to FXS = 1 km
- ▶ Caller ID receiving function
- ▶ Remote system maintenance and upgrade
- ▶ Intelligent Routing Management
  - Backup route
  - Routing by time section
  - Routing by Answer Success Ratio (ASR) condition
  - Routing as trunk group distribution
- ▶ Call Incoming Management
  - Hotline mode
  - DID mode
  - DNI/ANI re-dialing by dial tone or IVR
  - Built-in IVR for Calling Card System or alike application
- ▶ System call back
- ▶ CDR exporting, support Syslog CDR
- ▶ Capable to work with TeleSynergy's SS7/ISUP solutions
- ▶ Support TeleSynergy proprietary Web NMS Server Management system
- ▶ On line configuration management, status monitoring and fault management

### SPECIFICATIONS

- ▶ Call Control: SIP
- ▶ Voice Codec : G.711, G.729A , G.723.1
- ▶ Silence Suppression: G.729B for G.729A, G.723.1a for G.723.1 (6.3k/5.3k)
- ▶ Echo cancellation: G.165 / G.168
- ▶ Fax protocol: T.38 FAX relay supports Group III V.17, V.21, V.27ter, V.29, V.33 (2.4 to 14.4 Kbps)
- ▶ Gain Control : ±18db
- ▶ Media stream : RTP / RTCP with jitter buffering
- ▶ Signaling
  - ISDN PRI: ITU Q.931
  - Wink start: Bellcore GR-506
  - Hot Line
  - MFR1
  - MFR2
- ▶ T1/E1 Interface:
  - Frame format:
    - T1: ESF/SF
    - E1: CRC4
  - Line code:
    - T1: AMI, B8ZS
    - E1: HDB3
  - CRC check capability
  - Load impedance: T1 -100 ohm, E1 – 75/120 ohm, +- 5%
  - Clock source: internal timing or recover clock from T1/E1 port
  - Clock frequency departure: less than +- 50 ppm
- ▶ SIP Protocol :
  - RFC-3261 SIP
  - RFC-2833 out-band DTMF
  - RFC-2327 SDP
  - RFC-3264 offer/answer model
- ▶ Management: Proprietary Web NMS / SNMP / Telnet / Console
- ▶ Connector:
  - 1 RJ-45 phone jack for T1/E1 interface
  - WAN/LAN: RJ-45
- ▶ Power: 90~240V · 47~63Hz 50W(max)
- ▶ Dimension: 440mm x 44mm x 173mm, 1U
- ▶ Weight: net weight 2.8kg, gross weight 3.8kg
- ▶ Operating Temperature: 0°C to 45°C
- ▶ Storage Temperature: -10°C to 70°C